DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017444 Address: 333 Burma Road **Date Inspected:** 04-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Oiu Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Tower & OBG Components

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 16 located on Bike Path BK004A6 – 028. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B - T - 2133. (See attached photo)

Weld joint # 16 located on Bike Path BK004A6 – 028. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B - T - 2133.

BAY#11

This QA Inspector observed the following work in progress

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Shielded Metal Arc Welding (SMAW):

Weld joint # 12A located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 046769. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS - B - T - 3213 - Tc - U4b.

Weld joint #8B located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 041271. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - Tc - U4b. (See attached photo)

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint #25 located on Bike Path BK004A6 – 017. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS - B - P - 2112.

Weld joint # 37 located on Bike Path BK004A6 – 017. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS - B - P - 2113.

Weld joint # 159 located on Bike Path BK004A6 – 017. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS - B - P - 2112.

Weld joint # 159 located on Bike Path BK004A6 – 017. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS - B - P - 2113.

Surface Welding by Fluxcore Arc Welding (FCAW):

Surface welding / buttering being performed as per the weld repair report B-WR14833 on bike path stringer plate. Welder is identified as 049220. ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – 345 – FCAW – 1G (1F) – Repair – 1.

BAY#12

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#12

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 03 located on U-rib splice plate SA3114B – 012. Welder is identified as 062265. ZPMC Quality Control (QC) Inspector is identified as Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - Tc - U4b - F.

Weld joint # 04 located on U-rib splice plate SA3111B – 009. Welder is identified as 062259. ZPMC Quality

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Control (QC) Inspector is identified as Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U4b - F.

Weld joint # 03 located on U-rib splice plate SA3114B – 012. Welder is identified as 062265. ZPMC Quality Control (QC) Inspector is identified as Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2231 - Tc - U4b - F.

Weld joint # 04 located on U-rib splice plate SA3111B – 009. Welder is identified as 062259. ZPMC Quality Control (QC) Inspector is identified as Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U4b - F.

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006856

Ultrasonic Testing (UT)

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

OBG, U-RIB SPLICE PLATE

SA3084 - 024 - 005;006

SA3084 - 025 - 005;006

SA3084 - 026 - 005;006

SA3084 - 027 - 005;006

SA3084 - 028 - 005;006

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for

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your project.

Inspected By: Kumar, Sandeep Quality Assurance Inspector

Reviewed By: Clifford,William QA Reviewer